and possessing a proteinaceous profile of greater than 25% dry weight. This molded food product is then optionally further processed into layered wafer crème bars, enrobed wafer crème bars, flavored wafer crème bars, sandwich wafer snacks, cone products, crème filled wafer products, converted into wafer inclusions for other bars/snacks/confections/foods, a wafer snack food product, a wafer cookie product (pizzelle), or a frozen breakfast waffle.

[0010] This invention features pressure molded proteinaceous wafers-cookies-waffles with greater than 25% dry weight protein composition, the pressure molding process to make such, and all resulting fabricated foods/confections/ingredients made utilizing the proteinaceous molded food items.

[0011] The proteinaceous molded foods may be made utilizing a protein blend consisting of proteinaceous ingredients, water soluble proteinaceous materials, and filler proteins, including whey protein isolate, modified wheat protein isolate, gluten, soy protein isolate, whey protein concentrate, textured wheat protein, textured vegetable protein, single cell protein, instantized whey protein isolate, instantized whey protein concentrate, milk protein concentrate, milk protein isolate, instantized milk protein isolate, soy protein concentrate, instantized soy protein, hydrolyzed collagen, gelatin, hydrolyzed gelatin, rennet casein, acid casein, egg protein, caseinates, instantized caseinates, and/fat and/or lecithin and/or wax and/or carbohydrate encapsulated versions or crosslinked or denatured versions of such. The proteinaceous ingredients may be crosslinked or bridged utilizing chemical and enzymatic crosslinking and/or bridging agents. These protein ingredients can optionally be blended with a carbohydrate including flour, starch, modified starch, soluble fiber, insoluble fiber, sugar, carbohydrate syrup, sugar alcohol, and modified flour.

[0012] The proteinaceous molded food item may be manufactured utilizing a protein/carbohydrate batter with a mass balance solids to water ratio between 1.00:0.500 to 1.00:4.00, not including the fats or lecithin included in the batter. The protein wafers may be manufactured in pressure molding systems, utilizing heated molding plates or drum, with temperatures less than 500° F. but greater than 100° F. The molded proteinaceous food item may be manufactured utilizing a protein batter with a viscosity less than about 25,000 centipoise (cP) but greater than 100 centipoise (cP), with the preferred being less than 5,000 cP but greater than 500 cP. The proteinaceous food products may be utilized to make flavored wafers, layered wafer bars, enrobed wafer bars, flavored wafer bars, sandwich wafer snacks, proteinaceous inclusion ingredients, fabricated wafer inclusion bars/cookies/candies, crème filled wafer products, wafer cone products, wafer confections, wafer cookies, and pizzelle wafer cookies, breakfast waffles, and a Chinese fortune cookie-like product.

DESCRIPTION OF THE PREFERRED EMBODIMENTS OF THE INVENTION

[0013] The following are examples of the invention:

EXAMPLE 1

[0014] A batter blend of ingredients consisting of 21% instantized (lecithin agglomerated) whey protein isolate (92% protein), 21% textured wheat protein (72% protein), 3% lecithin, 1% rice bran oil, 0.2% Sucralose (artificial sweetener), 0.1% vanillin, and 55% water were blended in a high speed homogenizing mixer until thoroughly liquefied into a batter-like consistency. The protein batter product was then directly applied to a preheated (310° F.) Heibenstreit stainless steel molded wafer plate. The plates were closed and locked in place, applying direct heat to the 2 mm batter sheet. Steam released through the vents and the product was cooked, under pressure, for 2.0 minutes. Final protein wafer was durable and low moisture (~2% moisture).

[0015] The solids to water mass balance of the batter is 1.00:1.25 and the viscosity of the batter (no added emulsifying agents, fats, sweeteners) was 1933 cP (±12% torque) @ 23.1° C. as run on a Brookfield DV-II+ Viscometer.

[0016] Final chemical composition of the pressure molded protein wafer was 78% protein, 5% fat, and –9% carbohydrate.

EXAMPLE 2

[0017] A batter blend of ingredients consisting of 99 lbs (26%) instantized (lecithin agglomerated) whey protein isolate (@92% protein), 40 lbs (10.5%) textured wheat protein (@72% protein), 40 lbs wheat flour, 3% lecithin, 1% rice bran oil, 0.2% Sucralose (artificial sweetener), 0.1% vanillin, and 200 lbs (53%) water were blended in a high speed square vessel mixer until thoroughly liquefied/blended into a batter-like consistency. The proteinaceous batter was then pumped through an overhead stainless steel 2 inch pipe system to the wafer machine and wand applied to preheated (~210° F.) Haas stainless steel molded wafer plates. The plates were closed and locked in place, applying direct heat to the 2 mm batter sheet. Steam released through the vents and the product was cooked, under pressure, for 2.0 minutes. Final protein wafer was durable and low moisture (~2% moisture).

[0018] The solids to water mass balance of the batter is 1.00:1.12 and the viscosity of the batter (no added emulsifying agents, fats, sweeteners) was 1600 cP (±40.7% torque) @ 24.1 C as run on a Brookfield DV-II+ Viscometer. The chemical composition of the wafer product is 67% protein, 22% carbohydrate, and 6% fat.

EXAMPLE 3

[0019] Proteinaceous batter ingredients consisting of 18 parts (18%) instantized whey protein isolate, 12 parts (12%) textured wheat protein, 12 parts (12%) soy protein isolate, 3 parts (3%) lecithin, 1 part (1%) rice bran oil, 0.2 parts Sucralose (artificial sweetener), 0.1 parts—lemon oil, and 53 parts (53%) water were blended in a high speed homogenizing mixer until thoroughly liquefied into a smooth batter-like consistency. The protein batter product was then directly applied to a preheated (310° F.) Teflon coated pizzelle wafer cookie molding plate system. The plates were closed and locked in place, applying direct heat to the 2 mm batter sheet. Steam released through the vents and the product was cooked, under pressure, for 2.5 minutes. Final high protein molded pizzelle wafer cookie was light weight, low moisture (<2%), and possessed a composition of 78% protein, 7% fat, and 4% carbohydrate.

[0020] The solids to water mass balance of the batter is 1.00:1.27 and the viscosity of the batter (no added emulsi-